

REMARKS

In the present application, claims 1, 4, 7-9, and 11-29 are pending. Claims 1, 8-9, 11-14, and 28 are rejected, and claims 4, 7, 15-17, and 29 are objected to in the present Office Action. Claims 18-27 are allowed. In the present response, Applicant is amending claims 7, 8 and 29 to better distinguish the claims of the present invention. Further, claims 13 and 25 are being amended to make clerical changes. No new matter is being added. In view of the foregoing amendments and following remarks, Applicant respectfully requests reconsideration of the application.

Rejection under 35 USC §103

In paragraph 2, page 4 of the Office Action, the Examiner rejected claims 1, 8-9, 11-13, and 28 under 35 USC §103 as being obvious over *Dye* (U.S. Patent No. 6,108,014). Applicant respectfully traverse.

Claim 1 recites "... the first bounding box surrounding at least one source operand for the first graphics primitive..." The present invention defines a source operand as "sets of pixel locations that each primitive *reads* in order to complete its drawing operation (page 15, lines 3-4), as opposed to a destination operand which is defined as "the set of pixel locations where each primitive *will draw* its graphics upon completion" (page 15, lines 5-7). Applicant contends that *Dye* does not contemplate a bounding box about sets of pixel locations which are read.

Referring to Examiner's arguments on page 5 of the office action, Examiner states "each window workspace area on the screen is deciphered to be represented in X, Y, Z coordinate space. And, *Dye* suggest that each object or bounding box is represented in X, Y, Z space. Hence, a bounding box is [intrinsically] surrounding each window workspace area *on the screen* where triangles representing the [sic] each object or bounding box *will be rendered*." In other words, the bounding box surrounds triangles (e.g., sets of pixels) where the

triangles *will be drawn*. Thus, the bounding box of *Dye*, according to Examiner's own argument, refers to a destination bounding box.

Additionally, the specification of *Dye* inherently describes comparison of similar types of bounding boxes because each bounding box is described in the same space. Thus, according to the Examiner's arguments (which Applicant traverses), *Dye* only contemplates comparison of destination bounding boxes with other destination bounding boxes.

In fact, *Dye* never discloses comparison of source bounding boxes, nor even contemplates source bounding boxes. Further, it would not have been obvious to one skilled in the art to contemplate the use of source bounding boxes in the context of *Dye*. As such claim 1 is not obvious in view of *Dye*.

Amended claim 8 now recites in part determining whether a "*write after write dependency*" exists between a first set of destination pixels (or corresponding bounding box) and a second set of destination pixels (or corresponding bounding box). The Examiner found that the prior art fails to teach "... a write after write dependency is detected if the second bounding box overlaps the first bounding box" (see *Reason for Indicting Allowable Subject Matter* page 11 of the Office Action). Therefore, claim 8 is in allowable form. Furthermore, because claim 9 depends from claim 8, claim 9 also is allowable for the same reasons as claim 8.

Regarding claim 11, the claim recites "comparing a set of destination pixel locations of the first graphics primitive with at least one set of *source pixel locations* of the second graphics primitive." As discussed above with respect to claim 1, *Dye* does not disclose comparison of source pixel locations (e.g., source operand) with destination pixel locations (e.g., destination operand).

The Examiner argues that "the source operand characterizes the Z memory or Z values of X, Y area of box 1 or 2 as implied to [sic] in the depiction at col. 67, lines 15-23." This reference in *Dye* states "memory is allocated for the Z values for the X, Y area..." if an intersection occurs. However if no intersection

occurs, “memory is not allocated for Z values” (col. 67, lines 13-14). Thus, the use of Z values and Z memory are not even contemplated until an intersection is already detected. It is nonsensical that a memory that is not considered until an intersection is already detected be used to determine if there is an intersection (i.e., dependency). As such, the source operand does not characterize the Z memory or Z values as contemplated by the Examiner. Additionally as discussed above, a source operand is defined as sets of pixel locations that each primitive *reads* in order to complete its drawing operation. Therefore, claim 11 is not obvious in view of *Dye*.

Claims 12 and 13 depend from claim 11. As such, claims 12 and 13 are allowable for the same reasons as claim 11.

Claim 28 is cancelled.

Rejection under 35 USC §102(e)

In paragraph 4 starting on page 9 of the Office Action, the Examiner rejected claim 14 under 35 USC §102(e) as being anticipated by *Dye*. Specifically, the Examiner contends *Dye* comprises a destination reservation station, a source reservation station, and a first comparator. Applicant traverses.

Claim 14 recites “a source reservation station for storing a source bounding box location...” As previously discussed, *Dye*, according to the Examiner’s arguments, only suggests destination bounding boxes and the comparison of the same. There is no mention of sourcing bounding boxes or a source reservation station for storing the sourcing bounding box location. Therefore, claim 14 is not anticipated by *Dye*.

Allowable Subject Matter

In paragraph 5 on page 10 of the Office Action, claims 18-27 are found to be allowable over the prior art.

Further in paragraph 6 on page 10, claims 4, 7, 15-17, and 29 are objected to be as being dependent upon rejected base claims. Claims 4 and 7 depend from claim 1 which Applicant contents is allowable. Claims 15-17 depend from claim 14 which Applicant believes is allowable. Claim 29 is amended to incorporate the limitations of claim 28, and is now in condition for allowance.

Conclusion

Based on the foregoing amendments to the claims and the above remarks, Applicant believes that the objections and rejections in the Office Action of September 17, 2003 are fully overcome, and that the application is in condition for allowance. If the Examiner has questions regarding the case, the Examiner is invited to contact Applicant's undersigned representative.

Respectfully submitted,
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Date: 12/10/03

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